

## **SARDIS CHURCH ROAD / SGODA ROAD EXTENSION**

### **1.1 BACKGROUND**

In recent years, state and local transportation planning officials have been assessing connectivity and mobility needs in the south Macon/Bibb County area. Identification of needs and project development was coordinated among the various planning entities; this area is partly within the Macon urbanized area where transportation planning is led by the Macon Metropolitan Planning Organization (MPO); outside the urbanized area, GDOT's Office of Planning is the primary lead.

#### **GDOT Office of Planning's Preliminary Investigation, June 2010**

The GDOT Office of Planning led a simple and limited 'sketch-level' feasibility consideration for a separate alternative of the Fall Line Freeway (from SR 247 to I-16), as discussed by the Macon-Bibb County Planning and Zoning Commission at that time. Specifically, it considered a potential project beginning at the terminus of the Sardis Church Road Extension project (known as GDOT project #0000566) where it would begin as a new roadway. From there it could continue eastwards across the broad Ocmulgee River and its floodplain area; then proceeding northeast to connect along the existing Huber Road and through the existing intersection at US 23/SR 87; and then follow existing Sgoda Road to its current terminus at I-16.

The purpose of this high-level preliminary analysis was to determine the very broad environmental and engineering challenges that may be associated with this proposal. This study determined that the project could warrant further detailed study wherein more precise costs, environmental impacts and benefits could be determined.

#### **Federal Highway Administration's "14<sup>th</sup> Amendment Highway" Study**

It was during the Federal Highway Administration's "14<sup>th</sup> Amendment Highway" study (completed June 2011) that local considerations of a Sardis Church Road/Sgoda Road Extension were again discussed with increasing focus. That study's scope did not include looking at its feasibility. However stakeholder comments envisioned that such a route could follow along SR 49 from south of Sardis Church Road to US 41, continue as a new roadway (on "new alignment") to Sgoda Road east of I-16, and then generally follow Sgoda Road to terminate at SR 57.

## Transportation Investment Act (“TIA”)

More recently, as part of preparing an approved list to be considered by voters in late July 2012 as per the state Transportation Investment Act (TIA), Bibb County proposed two segments related to a proposed Sardis Church Road/Sgoda Road Extension project:

- Phase I – proposed Sardis Church Road widening and extension connecting I-75 to SR 247. Known as TIA project #RC06-000038, it proposed TIA funds to cover approximately 20 percent of project total.
- Phase II – proposed Sardis Church Road extension from SR 247 to I-16/Sgoda Road. Known as TIA project # RC06-000036, it proposed TIA funds for Preliminary Engineering and Right-of-Way acquisition activities.

Figure 1 shows a red dashed ‘swath’ which very generally indicates where a Sardis Church Road/Sgoda Road Extension project was considered. (Note: This does not indicate precise location of where a route would go, if it was to be developed.)

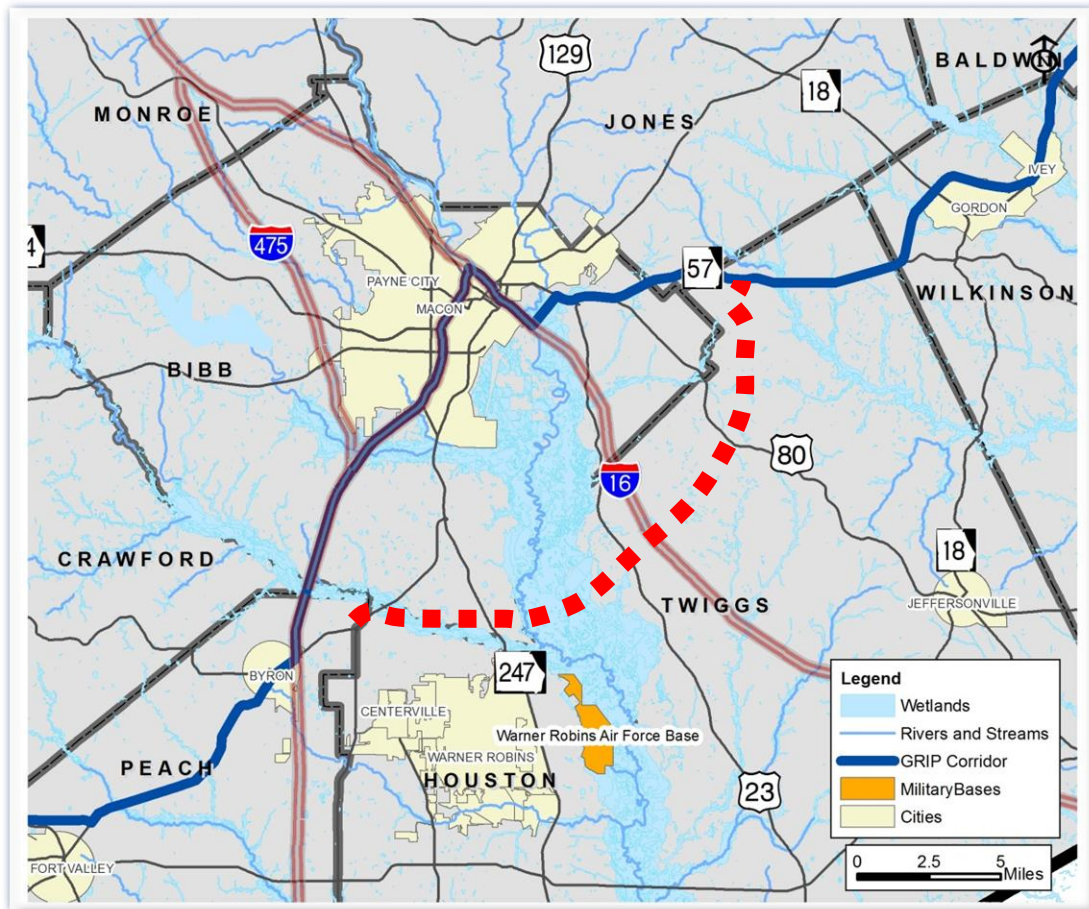


Figure 1: Proposed Sardis Church Road/Sgoda Road Extension (in red)

Figure 1 also shows its estimated relation to the officially designated route of the Fall Line Freeway, shown in dark blue. The Fall Line Freeway is co-routed with the existing routes of I-75 south of I-16, I-16 south of the I-16/75 interchange, and US 80/129/Coliseum Drive and SR 57.

**In 2012**, several new projects were completed or under development within the Macon MPO area of south Bibb County. This included completion of a new I-75 interchange at Sardis Church Road and proposed extension of Sardis Church Road from east of Skipper Road to State Route 247 (SR 247). Another proposed project nearby would widen/extend SR 49 from south of Sardis Church Road to US 41; this project is located in the Warner Robins urbanized area where transportation planning is led by the Warner Robins MPO.

In addition to these projects, this area is in a region that includes the “Fall Line Freeway”; previously, in one section there were environmental studies conducted to determine a corridor route; however, no prudent or feasible alternative was identified. Consequently the Fall Line Freeway in that area follows existing roadways.

#### **Macon MPO: Long Range Transportation Plan Update (adopted: Apr. '13)**

The portion of the proposed Sardis Church Road/Sgoda Road Extension project within the Macon MPO area was included in the latest Long Range Transportation Plan Update for the Macon MPO. The MPO adopted this document in April, 2013 and included the portion of the project in their area with a “network year” of 2040.

#### **GDOT Office of Planning’s “Connect Central Georgia” study” completed 2013** Subtask: Sardis Church Road/Sgoda Road Extension – Special Report

The Connect Central Georgia took on a subtask to conduct the detailed and final robust analysis regarding such issues as detailed needs, feasibility, and costs associated with pursuing a proposed Sardis Church Road/Sgoda Road Extension project as a whole.

### **1.2 SARDIS CHURCH ROAD/SGODA ROAD EXTENSION –**

#### **A SUBTASK OF THE CONNECT CENTRAL GEORGIA STUDY**

This report outlines the further detailed analysis of a proposed Sardis Church Road/Sgoda Road Extension project considered within the GDOT Office of Planning’s Connect Central Georgia study. If developed, the proposed project could serve both as an alternative route connecting the Fall Line Freeway through Macon on new alignment, as well as providing a kind of ‘southern bypass’ for the Macon area.

Though not formally programmed, this proposed project has been officially endorsed by the Middle Georgia Regional Commission as well as local Macon officials.

## **OPPORTUNITIES AND CHALLENGES**

For the purpose of this more detailed analysis, the proposed project was divided into two segments. Segment 1 is shown in Figure 2; it considered spanning from I-75 to I-16 -- totaling approximately 11.3 miles and primarily being on ‘new alignment’. Segment 2 shown in Figure 3 could connect I-16 to Sgoda Road and generally follow Sgoda Road to SR 57, where it would connect to the existing Fall Line Freeway – totaling approximately 10.6 miles.

Purported benefits of the total proposed project could include:

- 1) Improving the movement of trucks servicing the kaolin industry;
- 2) Improving the access for freight flows to the south Bibb County, airport, and industrial areas; and
- 3) Improving the internal traffic flow south of Macon and to/from Robins Air Force Base and supplement the access already provided by SR 96.

Specifically, the new alignment could traverse approximately 2.5 miles of the Ocmulgee River and its floodplain, which are the habitat of several federally-designated endangered and state-protected plant species. In addition, traversing a floodplain would also encounter areas that could be officially considered as wetlands, which would have significant environmental considerations. Other environmental issues may be identified should a project be developed and any required detailed environmental studies be initiated.

It is worth noting that the tasks done as part of this study would not replace a comprehensive formal/official environmental impact study conducted during project development. High-level scans done as part of this study were precursory investigations of the feasibility of a proposed project focused on land-use considerations identified such as possible impacts to established residential areas, as well as possible impacts to potential historical, ecological and archeological resources.

*Note: Red dashed line in all figures very generally indicate a possible route but do not reflect the result of analysis or recommendations; they are relative estimates to indicate what routes would be connected.*



*Figure 2: Segment 1*



*Figure 3: Segment 2*

### **TRANSPORTATION NEED**

To understand the potential future traffic demand of a new roadway connection, the travel demand model was used to forecast traffic conditions for future year 2035. The assumption was that this potential facility could be a 4-lane roadway with a divided median.

According to the travel demand model, the projected total traffic volumes on Segment 1 would be approximately 10,500 vehicles per day while the traffic volumes for Segment 2 were projected to be 1,000 vehicles per day.

The travel demand model took into account all growth and land development assumptions included in the locally-adopted land use and comprehensive plan.

### **POTENTIAL ECONOMIC GROWTH**

One aspect of the proposed project could be increased potential for economic growth development due to enhanced connectivity to the area of the Macon Airport and surrounding industrial areas. Modeling analyses were performed comparing the growth in trades in the study area to the corresponding national average (between the years 2000 and 2009), as well as estimating impacts of potential future improvements, including an extension of Sardis Church Road.

Historical trend analyses showed the central region of the Connect Central Georgia study area historically had over 1,500 less manufacturing jobs and 935 mining jobs compared to national growth trends; this represented \$97 million less annual wages.

In addition, any trends that shift manufacturing to North American production may provide opportunities for future growth in related industries. Given these market dynamics, the potential benefits of attracting increased manufacturing and distribution activity to areas affected by the completion of a Sardis Church Road Extension were estimated. It was assumed that if full build-out of the office and industrial park land uses happened -- as identified in Macon-Bibb Co. year 2030 Comprehensive Plan -- the region could gain approximately 8,000 jobs at an annual payroll of over \$300 million.

### **ESTIMATED COSTS**

Due to the extensive floodplain associated with the Ocmulgee River in the area, the study assumed approximately 2.5 miles of a potential route represented in Segment 1 (Figure 2) would most likely need to be on “structure” (bridge spans), which would significantly increase the cost estimate to design and construct.

This would result in a total estimated cost of \$212.8 million for the total 11.3 miles of Segment 1. For Segment 2, which also traverses some potential wetlands, is estimated to cost \$131.6 million for approximate 10.6 miles.

### 1.3 SUMMARY

The limited preliminary feasibility study conducted by GDOT in the year 2010 for a Sardis Church Road-Sgoda Road extension project proposed by the Macon-Bibb County Planning and Zoning Commission indicated it may be feasible and further study would be needed for detailed consideration of cost and other issues.

Through the GDOT Connect Central Georgia Study, a more detailed assessment of the proposed project was conducted. Results of its analysis include:

#### *Opportunities of Developing the Corridor*

- There could be potential freight development benefits in connecting the industrially-zoned land to I-16 and I-75. A new route could make it easier for existing freight businesses while attracting new businesses. The project could also support enhanced east-west flow of traffic access through south Macon, for freight as well as general traffic.

#### *Challenges of Developing the Corridor*

- Cost estimates are significant, especially because bridging would likely be needed over identified wetlands. The cost estimate for Segment 1 is \$212.8 million and \$131.6 million for Segment 2.
- There is limited “through” truck traffic on the Fall Line Freeway; trucks going from Augusta to Columbus primarily utilize I-20 and I-85.

For freight traffic travelling through the study area, SR 96 is the primary route for trucks not bound for, or originating in, Macon. Future-year analysis from the statewide travel demand model indicates this trend likely will not change with implementation of the proposed project:

- SR 96 would still expect to carry 75% of the freight truck traffic between I-75 and I-16.
- Segment 1 of the proposed Sardis Church Road/Sgoda Road Extension Segment 1 would expect to carry 25% of freight traffic.
- Segment 2 does not provide significant benefits from a freight movement perspective. There is a limited amount of freight moving between I-16 and SR 57.

#### *Prioritization*

- The Connect Central Georgia Study recognized the Sardis Church Road/Sgoda Road corridor, as analyzed as future four-lane divided route, may be a strategic connection on a sub-regional level.
  - Prioritization of the proposed Sardis Church Road/Sgoda Road project, compared to other strategic connections identified in the Connect Central Georgia Study, resulted in both segments being ranked as a 3<sup>rd</sup> tier improvements out of 3 tiers.